

5     A Pharmaceutical Composition and Method of Modulating Cholinergic Function in a Mammal

Abstract

      A pharmaceutical composition and method of modulating cholinergic function in a mammal comprising administration of a NRPA compound or a pharmaceutically acceptable salt thereof; and an anti-emetic/anti-nausea agent or a pharmaceutically acceptable salt thereof; and a pharmaceutically acceptable carrier. The NRPA compound and the anti-emetic/anti-nausea agent are present in amounts that render the composition effective modulating cholinergic function or in the treatment of a disorder or condition selected from inflammatory bowel disease (including but not limited to ulcerative colitis, pyoderma gangrenosum and Crohn's disease), irritable bowel syndrome, spastic dystonia, chronic pain, acute pain, celiac sprue, pouchitis, vasoconstriction, anxiety, panic disorder, depression, bipolar disorder, autism, sleep disorders, jet lag, amyotrophic lateral sclerosis (ALS), cognitive dysfunction, hypertension, bulimia, anorexia, obesity, cardiac arrhythmias, gastric acid hypersecretion, ulcers, pheochromocytoma, progressive supranuclear palsy, chemical dependencies and addictions (e.g., dependencies on, or addictions to nicotine (and/or tobacco products), alcohol, benzodiazepines, barbiturates, opioids or cocaine), headache, migraine, stroke, traumatic brain injury (TBI), obsessive-compulsive disorder (OCD), psychosis, Huntington's chorea, tardive dyskinesia, hyperkinesia, dyslexia, schizophrenia, multi-infarct dementia, age-related cognitive decline, epilepsy, including petit mal absence epilepsy, senile dementia of the Alzheimer's type (AD), Parkinson's disease (PD), attention deficit hyperactivity disorder (ADHD) and Tourette's Syndrome. The method of using these compositions is also disclosed.